

-- 28. (Four Times Amended) An image pickup system adapted for use with any one of plural, diverse type image display devices, comprising:

an image pickup apparatus including an image sensor for photo-electrically converting a picked-up object image into an electrical signal, an image signal generating part for forming an image signal from the electrical signal, and a color space converting part for storing recognition attribute information for recognizing said image pickup apparatus and a plurality of predetermined, diverse color spaces selectable therein for directly converting a color space of the image signal without converting said image signal into a video signal; and

a display control part for controlling said image pickup apparatus and said display device,

wherein said control part controls said color space converting part to directly convert a color space of said image signal without converting said image signal into the video signal after receiving said recognition attribute information through interface means. --.

REMARKS

A "Request For Extension Of Time" for extending the due date for responding to the Office Action by two months and a credit card payment form to cover the fee payment (\$400) for the extension are filed with this Amendment. Authorization is also granted to charge our deposit account no. 18-1644 for any additional fees necessary in order to enter this Amendment.

Claims 1, 10, 20, 24 and 28 have been amended. A marked-up version of the amendments to these claims is submitted as "Attachment A - Marked-Up Version of Claim Amendments."

Independent claims 1, 10, 20, 24 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Takizawa et al., U.S. Patent No. 5,734,425 in view of Lightbody et al., U.S. Patent No. 5,471,577. The rejections are respectfully traversed and reconsideration is requested.

Independent claim 1 has been amended and now recites:

An image pickup system comprising:

an image pickup apparatus including an image sensor for photo-electrically converting a picked-up object image into an electrical signal, an image signal generating part for forming an image signal from the electrical signal, a color space converting part for storing recognition attribute information for recognizing said image pickup apparatus and a plurality of predetermined, diverse color spaces selectable therein for converting a color space of the image signal without converting said image signal into a video signal, and an interface part for externally transferring the image signal and said recognition attribute information to an external signal processing apparatus; and

said external signal processing apparatus connected to said interface part having a signal processing circuit for processing said image signal transferred through said interface part and having a control part for controlling said image pickup apparatus through said interface part,

wherein said control part receives said recognition attribute information and controls said color space converting part to directly reduce an amount of image signals transferred through said interface part without converting said image signal into the video signal.

It is submitted that neither reference nor the alleged combination thereof discloses or suggests the image pickup systems, as claimed in independent claims 1 and 28, the image pickup apparatus, as claimed in independent claim 10, the image pickup unit, as claimed in independent claim 20, or the image picked-up image signal processing apparatus, as claimed in

independent claim 24. Particularly, neither the Takizawa et al. reference nor the Lightbody et al. reference, alone or in alleged combination, discloses or suggests a color space converting part for storing recognition attribute information for recognizing an image pickup apparatus or an interface part for performing communication with an external signal processing apparatus for storing recognition attribute information for recognizing an image pickup unit, as claimed. Nor does either reference disclose or suggest directly color space converting without converting an image signal into a video signal, as claimed.

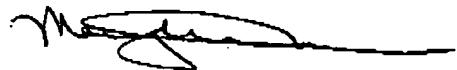
The Examiner acknowledged that the Takizawa et al. reference does not disclose or suggest a color space converting part, as claimed, and accordingly relies on the Lightbody et al. reference. However, it is submitted that the Lightbody et al. reference merely discloses needing a video signal before color converting and does not disclose reducing the size of the image pickup apparatus. In comparison, however, the present claimed invention can reduce the size of an image pickup apparatus by directly converting color space without converting an image signal obtained from, for example, a CCD, into a video signal. Accordingly, neither the Takizawa reference nor the Lightbody et al. reference, alone or in alleged combination, discloses or suggests the present claimed invention. In addition in the present invention, when using recognition attribute information to recognize an image pickup apparatus, an optimal color space matching can be obtained. Accordingly, the present invention can achieve an optimally sized and color matched image pickup system which is not disclosed or suggested by the references. Furthermore, even if the references were combinable, as suggested, such alleged combination would not disclose or suggest the present invention, as claimed in the amended independent claims. The independent claims are therefore submitted as being patentable.

Based upon the patentability of the independent claims, the dependent claims are also submitted as being patentable since they differ in scope from the parent independent claims.

If the Examiner believes that an interview would expedite consideration of this Amendment or of the application, a request is made that the Examiner telephone applicants' counsel at (212) 682-9640.

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Respectfully submitted,



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ATTACHMENT A - MARKED-UP VERSION OF CLAIM AMENDMENTS

In the Claims

- 1. (Six Times Amended) An image pickup system comprising:
 - an image pickup apparatus including an image sensor for photo-electrically converting a picked-up object image into an electrical signal, an image signal generating part for forming an image signal from the electrical signal, a color space converting part for storing [an] recognition attribute information [of] for recognizing said image pickup apparatus and a plurality of predetermined, diverse color spaces selectable therein for converting a color space of the image signal without converting said image signal into a video signal, and an interface part for externally transferring the image signal and said recognition attribute information to an external signal processing apparatus; and
 - [an] said external signal processing apparatus connected to said interface part having a signal processing circuit for processing said image signal transferred through said interface part and having a control part for controlling said image pickup apparatus through said interface part,

wherein said control part receives said recognition attribute information and controls said color space converting part to directly reduce an amount of image signals transferred through said interface part without converting said image signal into the video signal. —
- 10. (Six Times Amended) An image pickup apparatus comprising:
 - an image sensor for photo-electrically converting a picked-up object image into an

electrical signal;

an image signal generating part for forming an image signal from the electrical signal;

a color space converting part for storing [an] recognition attribute information [of] for recognizing said image pickup apparatus and a plurality of predetermined, diverse color spaces selectable therein for converting a color space of the image signal without converting said image signal into a video signal; and

an interface part for externally transferring the image signal and said recognition attribute information to an external signal processing apparatus,

wherein said color space converting part is controlled by [an] said external signal processing apparatus connected to said interface part to directly reduce an amount of image signals transferred through said interface part after transferring said recognition attribute information through said interface part without converting said image signal into the video signal.

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— 20. (Six Times Amended) An image pickup unit comprising:

image pickup part for picking up an optical image to form a picked-up image signal;

interface part for performing communication with an external signal processing apparatus for storing [an] recognition attribute information [of] for recognizing said image pickup unit; and

color space compression control part having a plurality of predetermined, diverse color space compression data for controlling and directly reducing an amount of picked-up signals

transferred to said external signal processing apparatus without converting said image signal into a video signal according to a control signal supplied from said external signal processing apparatus through said interface part after transferring said recognition attribute information through said interface part. --.

-- 24. (Six Times Amended) A picked-up image signal processing apparatus comprising:
interface part for performing communication with an image pickup unit including
said image pickup unit for picking up an optical image to form a picked-up image signal, [an]
recognition attribute information [of] for recognizing said image pickup unit and a plurality of
predetermined, diverse color space conversion data therein; and

transmission control part for transmitting to said image pickup unit through said
interface part a control signal for controlling and directly reducing an amount of each color signal
picked-up image signals transferred through said interface part without converting said image
signal into a video signal after receiving said recognition attribute information through said
interface part. --.

-- 28. (Four Times Amended) An image pickup system adapted for use with any one of
plural, diverse type image display devices, comprising:

an image pickup apparatus including an image sensor for photo-electrically
converting a picked-up object image into an electrical signal, an image signal generating part for
forming an image signal from the electrical signal, and a color space converting part for storing
[an] recognition attribute information [of] for recognizing said image pickup apparatus and a
plurality of predetermined, diverse color spaces selectable therein for directly converting a color
space of the image signal without converting said image signal into a video signal; and

a display control part for controlling said image pickup apparatus and said display device,

wherein said control part controls said color space converting part to directly convert a color space of said image signal without converting said image signal into the video signal after receiving said recognition attribute information through [an] interface means. --.